~~325.1~~
A3 5.

MEMORANDUM FOR REGIONAL FORESTER
PROGRESS REPORT ECW INSECT CONTROL PROGRAM
TO JULY 20, 1933

MILLER, J. M. et al.
BERKELEY, CALIFORNIA
JULY 20, 1933

MEMORANDUM FOR REGIONAL FORESTER
PROGRESS REPORT ECW INSECT CONTROL PROGRAM
TO JULY 20, 1933

Modoc National Forest
Camp F-3; Foreman, R.L. Furniss

The Modoc crew, consisting of three spotters, completed twice the work in the period June 25-30 that had been done by an enlisted crew during the previous two weeks. This crew is cruising plots for (1) determination of complete 1932 losses and pickup of 1933 losses through periodic cruises to determine the type of 1933 infestation and its development through the season; and (2) to determine the mortality and survival in 1932 winter-brood trees through bark and emergence counts and, if proven feasible, through comparison with 1931 emergence counts.

Lassen National Forest
Camp F-49; Foreman, P.C. Johnson

The Lassen crew, which up to June 30 consisted of one foreman and four enlisted men, has completed examinations of but two plots, one of which cannot be considered satisfactory work. Steps have been taken to fill this crew with hired spotters.

Shasta National Forest
Camp F-17; Foreman, F.W. Bacon

The work to be undertaken by the ECW crew has been outlined and plots selected. This work will probably include a check of control at Soldier Mountain and Cayton Valley, a lodgepole control project near Medicine Lake, and determination of freeze effects and brood development (quantitative) on selected plots, as well as organization of the area into control units and development of a series of survey plots.

Eastern Plumas

Examination of the eastern Plumas showed considerable 1932 Jeffrey pine loss, but little loss in ponderosa pine. This area was organized for a fall cruise, plots selected and arrangements made for the work, which may possibly be handled by the crew in the Lassen Forest.

Tahoe National Forest

Examination of the Sattley area showed a considerable portion of the heavily infested area covered by a reconnaissance survey in 1930 has been logged, and only about two sections remain uncut. A strip through this area, following closely the strip cruised in 1930, showed only three 1932 infested Jeffrey pine, or about 30 per section, whereas results in 1930 showed an average of 110 trees per section.

Bell's Canyon, which suffered heavy losses during the past three years, is also being cut at the present time. It is not thought advisable, in view of the limited values left in the area, to organize a fall survey for this area unless it is intended to establish cutover plots. The fact that a large portion of the stand in these areas is Jeffrey pine makes this action questionable.

K. A. Salman,
Associate Entomologist.

Stanislaus National Forest

The personnel of the insect survey branch of the ECW camps set up on this Forest were assigned to Camp 17 during the period June 12-30 inclusive. Three crews of three men each were organized and given their camp assignments early in July, as follows:

Camp F-86 - Foreman, Fred Meckel
" F-84 - " Ted Johnson
" F-82 - " S.S. Malven

It will be noted that a total of 1,880 acres in Camp 17 area were covered by intensive spotting methods in 69 man-days, and that six trees were treated by the solar-heat method. Stem analyses of these trees were also made.

This initial work was intended primarily as training for the spotting crews, and for this reason no attempt was made to cover extensive areas by the survey work. Rather, during this period, it was the aim to keep the crews closely knit together on small field areas, in order that each member might receive the necessary intensive training needed before the crews were individually assigned to other camps.

In addition to the intensive training given the men in the survey work, the infestation zone in standing timber bordering a great mass of sugar pine logging slash was surveyed and thoroughly studied. A report on this phase of the field work will be submitted later.

The demonstration of the method used in the solar-heat treatment of infested trees was carried out for the purpose of familiarizing the men with this method of control. Stem analysis records were made in order to give the men first-hand information on the primary and secondary insects infesting the trees, the seasons of attack and their relations to the color phase of the foliage and other external appearances of the attacked trees.

J.E. Patterson,
Supervisor, Insect Control.

Sierra National Forest

Camp F-91; Foreman, Ike Hastings

Control work accomplished during this period (June 27-July 20) against western pine beetle infestations has been carried on by ECW labor from Sugar Pine. Two four-man crews were used for a two-week period, when it was found that an increase in the number of dying trees made it necessary to organize two more four-man crews to speed operations before the first generation flight of the beetle. Part of the personnel of these crews was made up of experienced fallers.

Spotting was carried on by the spotter foreman, with considerable assistance given by the control foreman. A total of 3,960 acres surrounding Bass Lake has been covered once by topographic cruises, resulting in the location of 231 infested trees. A second survey of the same areas is in progress and many new trees are being located. Large groups of trees are foundto be killed, the largest of these being a single group of 77 trees, while in another 43 trees were found. Both large and pole-size trees are infested.

A total of 155 infested trees, with a volume of 127,320 bd.ft. has been treated to date, with 150 man-days consummated. All logs were peeled and the bark spread over the surface of the ground, inner surface up, where the heat absorbed by the sun was effective in killing the broods. Samples of bark treated in this way showed thorough killing of all stages of brood.

Nearly all trees treated show unusually large broods of the western pine beetle, and with the one exception that there are also unusually large numbers of the predacious clerid beetles, every indication points toward epidemic conditions. Fast- and slow-growing trees alike are attacked and killed. With rapid elimination of this menace at the beginning, a considerable showing should be made before the second flight, due July 25 to August 5.

C.R. Strubke,
Assistant Entomologist.

Southern California

San Bernardino and Cleveland National Forests

Plans for work in the southern California areas were held up until a reconnaissance was made by Miller June 19-30. A very light infestation was found in the Lake Arrowhead and Big Basin districts. After a discussion of plans with Forest Supervisors Elliott and Anderson it was decided that an insect control supervisor on general assignment could direct the work on all areas with the aid of three or four spotters to be assigned to specific jobs as needed. Ashley C. Browne was therefore transferred from northern California, and reported at Camp Radford, on the San Bernardino, July 14. He will work out of this camp on all the southern California projects. Up to the present time he has been engaged on a reconnaissance of the areas that have been proposed by the forest supervisors for control work. Two spotters are to report to him

on July 27 for training at Camp Radford. A few trees have already been treated by Assistant Ranger Dave Tucker with ECW labor in the Camp Radford area. Under present plans enough treating labor will be developed by summer work at the ECW camps to take care of a more intensive program in the fall.

Santa Barbara National Forest
Camp F-117; Spotter, James Kelley

Kelley reported at the Figueroa Camp June 18 in company with Phil Johnson of the Bureau of Entomology. The period from then until June 27 was spent on an intensive cruise of the Figueroa and East Pinery units. Several summer-brood trees were then treated by the solar-heat method. Johnson returned to Berkeley June 30. A detailed plan for a summer control program has been prepared by Miller and Johnson for this area and submitted to the Forest Supervisor, Camp Superintendent and Regional Office.

J. M. MILLER,

Senior Entomologist.